Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0604574N: Navy Tactical Computer Resources

BA 5: Development & Demonstration (SDD)

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	4.441	4.443	3.848	-	3.848	3.899	3.979	4.502	4.578	Continuing	Continuing
1353: Standard Hardware	4.441	4.443	3.848	-	3.848	3.899	3.979	4.502	4.578	Continuing	Continuing

### A. Mission Description and Budget Item Justification

The Common Processing System (CPS) and Common Display System (CDS) programs are being executed to bring open architecture hardware and technology utilization into a common configuration in a competitive sourcing environment. CPS provides the computer processing and memory, data storage and extraction, and Input/Output (I/O) interface to support hosting Navy combat system software applications and management of computing resources in support of the AEGIS Modernization program, the CVN 78 program and other SSDS MK 2 ships. CDS provides common human machine interface (Combat Information Center (CIC) consoles) to the AEGIS Open Architecture (OA) computing environment and provides war fighter team situational awareness in support of the AEGIS Modernization program. CDS also provides the same capabilities to DDG 1000, LCS, SSDS MK 2 ships (CVN, LHD, LHA, LPD, LSD). CPS provides technical replacements of obsolete processing equipment (such as AN/UYQ-70 and Mission Critical Enclosure (MCE)) supporting multiple platforms including AEGIS new construction Destroyers and Cruisers/Destroyers undergoing modernization, the CVN 78 program and other SSDS MK 2 ships.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	4.601	4.443	4.533	-	4.533
Current President's Budget	4.441	4.443	3.848	-	3.848
Total Adjustments	-0.160	-	-0.685	-	-0.685
<ul> <li>Congressional General Reductions</li> </ul>		-			
<ul> <li>Congressional Directed Reductions</li> </ul>		-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>		-			
<ul> <li>Congressional Directed Transfers</li> </ul>		-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-0.160	-			
<ul> <li>Program Adjustments</li> </ul>	-	-	-0.678	-	-0.678
Rate/Misc Adjustments	-	-	-0.007	-	-0.007

### **Change Summary Explanation**

Technical:

FY12 - 10% general reduction.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Just		<b>DATE</b> : February 2011										
APPROPRIATION/BUDGET ACTIV	/ITY			R-1 ITEM N	OMENCLAT	TURE						
1319: Research, Development, Test & Evaluation, Navy				PE 0604574N: Navy Tactical Computer 1353: Stand					dard Hardware			
BA 5: Development & Demonstration (SDD)												
COST (\$ in Millions)			FY 2012	FY 2012	FY 2012					Cost To		
COST (\$ III MIIIIOIIS)	FY 2010	FY 2011	Base	oco	Total	FY 2013	FY 2014	FY 2015	FY 2016	Complete	<b>Total Cost</b>	
1353: Standard Hardware	4.441	4.443	3.848	-	3.848	3.899	3.979	4.502	4.578	Continuing	Continuing	
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0			

### A. Mission Description and Budget Item Justification

nliabments/Dianned Brograms (f in Millians, Article Quantities in Each)

The Common Processing System (CPS) and Common Display System (CDS) programs are being executed to bring open architecture hardware and technology utilization into a common configuration in a competitive sourcing environment. CPS provides the computer processing and memory, data storage and extraction, and Input/Output (I/O) interface to support hosting Navy combat system software applications and management of computing resources in support of the AEGIS Modernization program, the CVN 78 program and other SSDS MK 2 ships. CDS provides common human machine interface (Combat Information Center (CIC) consoles) to the AEGIS Open Architecture (OA) computing environment and provides war fighter team situational awareness in support of the AEGIS Modernization program. CDS also provides the same capabilities to DDG 1000, LCS, SSDS MK 2 ships (CVN, LHD, LHA, LPD, LSD). CPS provides technical replacements of obsolete processing equipment (such as AN/UYQ-70 and Mission Critical Enclosure (MCE)) supporting multiple platforms including AEGIS new construction Destroyers and Cruisers/Destroyers undergoing modernization, the CVN 78 program and other SSDS MK 2 ships.

Title: Systems Engineering  Articl FY 2010 Accomplishments:	4.441 es: 0	4.443 0	3.848
FY 2010 Accomplishments:	es: 0	0	0
			o <sub> </sub>
3 11 10			
Provided Common Display System (CDS) and Common Processing System (CPS) technical design for replacements of obsolete AN/UYQ-70 display and processing equipment supporting multiple platforms including AEGIS Destroyers and Cruisers undergoing modernization.			
FY 2011 Plans:  Continue development of CDS and CPS to support multiple platforms including AEGIS Destroyers and Cruisers undergoing modernization, CVN 78 and other SSDS MK 2 ships. Perform technology refresh of CDS and CPS equipment.			
FY 2012 Plans: Continue development of CDS and CPS to support multiple platforms including AEGIS Destroyers and Cruisers undergoing modernization, CVN, DDG 1000 and other platforms. Perform technology refresh of CDS and CPS equipment.			
Accomplishments/Planned Programs Subtot	als 4.441	4.443	3.848

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Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	-
1319: Research, Development, Test & Evaluation, Navy	PE 0604574N: Navy Tactical Computer	1353: Stand	dard Hardware
BA 5: Development & Demonstration (SDD)	Resources		

### C. Other Program Funding Summary (\$ in Millions)

N/A

### D. Acquisition Strategy

Contracts:

CDS IDIQ Production continues FY10-FY16.

CPS IDIQ Production commences FY11-FY16.

#### **E. Performance Metrics**

**CDS Performance Metrics** 

#### FY10 Funding:

- -Successfully completed CDS Production Readiness Review (PRR).
- -Successfully developed SW to support Non DDG 1000 customers.
- -Conducted several research projects to determine possible replacements for components becoming obsolete.
- -Conducted initial research for available alternatives to improve CDS console during the next Tech Refresh.
- -Conducted quarterly CDS/CPS TR/TI Working Group (WG) Mtgs with prime contractors and customers to identify technology refresh priorities, customer requirements, future technology trends, and obsolescence problems.
- -Conducted several CDS Technical Interchange Meetings (TIMs) on an as-needed basis to explore and resolve emergent technical design issues.

# FY11 Funding:

- -Successfully complete CDS Tech Refresh/Tech Insertion (TR/TI) Systems Requirements Review (SRR), as required.
- -Conduct quarterly CDS/CPS TR/TI WG Mtgs with prime contractors and the customers to identify technology refresh priorities, customer requirements, future technology trends, and obsolescence problems.
- -Conduct CDS TIMs on an as-needed basis to explore and resolve emergent technical design issues.
- -Successfully complete CDS Technology Refresh Environmental Qualification (TREQ) testing, as required.
- -Continue researching requirements and possible solutions to minimize obsolescence issues during next Tech Refresh.
- -Develop required documentation to achieve ACAT III status.
- -Sucessfully complete required refresh research for build recompete

## FY12 Funding:

- -Successfully complete CDS TR/TI Preliminary Design Review (PDR), as required.
- -Conduct quarterly CDS/CPS TR/TI WG meetings with prime contractors and customers to identify technology refresh priorities, customer requirements, future technology trends, and obsolescence problems.
- -Conduct CDS TIMs on an as-needed basis to explore and resolve emergent technical design issues.

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy			<b>DATE</b> : February 2011
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604574N: Navy Tactical Computer	1353: Stand	dard Hardware
BA 5: Development & Demonstration (SDD)	Resources		

- -Successfully complete CDS TREQ testing, as required.
- -Sucessfully complete required refresh research for build recompete

#### **CPS Performance Metrics**

#### FY10 Funding:

- -Successfully completed CPS Test Readiness Review (TRR).
- -Conducted several research projects to determine possible replacements for components becoming obsolete.
- -Conducted quarterly CDS/CPS TR/TI WG meetings with prime contractors and customers to identify technology refresh priorities, customer requirements, future technology trends, and obsolescence problems.
- -Conducted CPS TIMs to explore and resolve emergent technical design issues.

### FY11 Funding:

- -Successfully complete CPS Production Readiness Review (PRR).
- -Successfully complete CPS Tech Refresh/Tech Insertion (TR/TI) Systems Requirements Review (SRR), as required.
- -Conduct Quarterly CDS/CPS TR/TI WG meetings with prime contractors and customers to identify technology refresh priorities, customer requirements, future technology trends, and obsolescence problems.
- -Conduct CPS TIMs to explore and resolve emergent technical design issues.
- -Continue researching requirements and possible solutions to minimize obsolescence issues during next Tech Refresh.
- -Develop required documentation to achieve ACAT III status.
- -Successfully complete CPS Environmental Qualification Testing (EQT), as required.

#### FY12 Funding:

- -Successfully complete CPS TR/TI PDR, as required.
- -Conduct Quarterly CDS/CPS TR/TI WG meetings with prime contractors and customers to identify technology refresh priorities, customer requirements, future technology trends, and obsolescence problems.
- -Conduct CPS TIMs to explore and resolve emergent technical design issues.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604574N: Navy Tactical Computer

Resources

PROJECT

1353: Standard Hardware

Product Development (\$ in Millions)			FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering	WR	NSWC:PHD	0.130	0.050	Feb 2011	0.039	Nov 2011	-		0.039	0.000	0.219	
Systems Engineering	WR	NSWC:Dahlgren	3.141	1.036	Nov 2010	0.848	Nov 2011	-		0.848	0.000	5.025	
Systems Engineering	WR	NSWC:Crane	0.799	-		-		-		-	0.000	0.799	
Systems Engineering	C/CPFF	General Dynamics:Fairfax, VA	1.602	1.148	Oct 2010	1.303	Jan 2012	-		1.303	Continuing	Continuing	Continuing
Systems Engineering	C/CPFF	DRS Technologies:Gaithersbu MD	rg, 0.478	-		-		-		-	0.000	0.478	
Systems Engineering	C/CPIF	Global Technical Systems:Virginia Beach, VA	0.401	2.000	Nov 2010	1.234	Jan 2012	-		1.234	Continuing	Continuing	Continuing
Systems Enginering	Various	Various:Various	0.097	-		-		-		-	0.000	0.097	
Systems Engineering	WR	SPAWAR:Charleston	-	-		0.231	Nov 2011	-		0.231	0.000	0.231	
		Subtotal	6.648	4.234		3.655		-		3.655			

Management Services (\$ in Millions)				FY 2011			Y 2012 Base		FY 2012 OCO				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Services	Various	Various:Various	0.100	0.209	Dec 2010	0.193	Dec 2011	-		0.193	0.100	0.602	
		Subtotal	0.100	0.209		0.193		-		0.193	0.100	0.602	

	<b>Total Prior</b>										Target
	Years			FY	2012	FY	2012	FY 2012	Cost To	'	Value of
	Cost	FY 2	2011	Ва	ase	0	CO	Total	Complete	<b>Total Cost</b>	Contract
Project Cost Totals	6.748	4.443		3.848		_		3.848			

**Remarks** 

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY  1319: Research, Development, Test & Evaluation, Navy  BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604574N: Navy Tactical Computer Resources	PROJECT 1353: Standard Hardware

**UNCLASSIFIED** 

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy PE 0604574N: Navy Tactical Computer 1353: Standard Hardware

BA 5: Development & Demonstration (SDD) Resources

# Schedule Details

	St	Start				
Events by Sub Project	Quarter	Year	Quarter	Year		
Proj 1353						
Common Display System (CDS) IDIQ Production	2	2010	4	2016		
Acquisition Milestones CDS PRR	2	2010	2	2010		
Acquisition Milestones CPS TRR	4	2010	4	2010		
Acquisition Milestones CPS PRR	2	2011	2	2011		
CPS Environmental QualificationTesting (EQT)	4	2010	2	2011		
CDS Indefinite Delivery/Indefinite Quantity (IDIQ) Production	2	2010	4	2016		
CPS Indefinite Delivery/Indefinite Quantity (IDIQ) Production	3	2011	4	2016		
Technical Insertion CPS PDR, as required	4	2012	4	2016		
Technical Insertion CPS SRR, as required	4	2011	4	2015		
Technical Insertion CPS CDR, as required	3	2013	3	2015		
Technical Insertion CDS PDR, as required	4	2012	4	2016		
Technical Insertion CDS SRR, as required	4	2011	2	2016		
Technical Insertion CDS CDR, as required	1	2013	1	2015		

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